

FLORIDA ATLANTIC UNIVERSITY LIBRARY

Edward Heiliger

Florida Atlantic University is a new upper-division and graduate state university on the southeast coast of Florida, at Boca Raton. It occupies a former government air field of some 1200 acres. The first phase buildings were occupied last summer, the second phase buildings are under construction, and the third phase are in the final planning stage. The first phase library occupies three floors of a five story building, the second phase will occupy the whole five floors, and the third phase (first addition) will double the five floor space. The Computer Center, with its IBM 1460 computer, is in the library building during Phase I only. The IBM 360 system has a delivery date of July 1966, the occupancy date for Phase II. The University now has 1187 students. This number is to grow to 10,000 by 1970. Colleges of Social Science, Science, Business Administration, Humanities, Education, and Engineering form the university organization.

The first year of work on the implementation of the computer based system began in July of 1964 in an old Air Force firehouse on the campus, with a staff of six professionals, eight clerks, and no collection. As of today, approximately \$500,000 has been spent for books and journals, the professional staff has been increased to fourteen, 23,000 titles have been cataloged and Library of Congress (LC) cataloging information for these put on computer tape. Authority files have been put on tape. A similar number of titles, bought in block purchases, has been IBM listed (with author, title, and fixed location number print-out) and is awaiting cataloging.

The first problem that had to be solved in the implementation of the computer based system was to teach the computer to print out the catalog in an order approximating that of the ALA Filing Rules. This was resolved by developing a coding system for the use of the catalogers, instituting new keypunching techniques, and doing some special computer programming.

Edward Heiliger is Director of Library and Information Retrieval Services of Florida Atlantic University in Boca Raton, Florida.

The second problem was to enable the computer to print out in both upper and lower case, with all of the diacritical marks for the western languages. A special computer chain was developed by us and made to order by IBM. The Yale-Harvard-Columbia medical libraries project and a group of colleges in Toronto took the same chain, with modifications to suit their special needs. It was agreed to agree on the first 88 characters so that any library wishing to use such a chain and paper tape input from a standard keyboard, could do so.

A third problem was to create authority files on tape, enabling the computer to print out authority lists and to provide the catalog print-out with the necessary cross references. This problem has been solved except for subject cross references. These have been coded and punched, however, and are only waiting for programming. The second edition of the catalog, coming out this summer, will have them. "See also" references are often blind. The first edition of the author catalog, which came out in September 1964, had 20,000 entries for 14,000 titles. Not all authors require an author authority entry. Only those where variant forms are a problem are included. Many of these are corporate authors. The title authority file is much smaller and is mostly for series titles.

The coding system for cataloging input has been adequately described in two articles by Jean Perreault.¹ Decisions have recently been made to eliminate all of the collation coding area except that part concerned with personal and corporate authors. This does not affect cataloging content but does limit the search capability for information retrieval. Arguments favoring this abandonment went like this: "Why should we go to the work of preparing input which would enable us to list all of the books in the collection published in France in 1909, on the subject of mollusks, when a quick examination of the subject catalog under mollusks would enable us to spot the items published in France in 1909, very easily?" If the use of the collation code provided more information than the cataloging copy itself, then, of course, this reasoning would not be valid.

Important changes in computer programming and key punching have just been made (March 25, 1965) which provide proper syllabification for word breaks at the ends of lines and starts series entries at the margins at all times. Proofreading is simplified. Formerly, we were unable to read proof on the tracings beyond the 40-character point. We are now able to read proof on the whole tracing. It is now easier to make changes in cataloging. There is less rigidity, inasmuch as each area can be expanded further. There is less need for frequent consultation between catalogers and key punchers, since the problem of limited areas never has to be solved by asking the cataloger for deletions. LC forms of entry will be usable without question, since none will be too long to be accommodated in Area 10. Area 31 will accommodate considerably more information, e.g.,

1. Pre-formatting for printing at 40 characters per line.
2. An additional 9 columns (41-49) may be used to account for spillage due to punching multi-column or non-printing characters. No text must appear beyond column 49.
3. Each new trace begins on a new card.
4. Columns 67-68 contain the two digit area number.
5. Column 69 contains the sequence number of each specific trace (0-9), hence a maximum of ten traces are allowed for each area.
6. Column 70 contains the card number (0-9), hence a maximum of 10 cards per trace. Example: For a particular item, three subject tracings are needed. The first contains 60 characters, the second contains 100 characters, and the third contains 35 characters.



IN AUTHOR CATALOG:

ALLEN, George Herman Michael Trevor
Allen, 1st Baron, 1876-1952.

An index of biographical materials relating to scientists of the United Kingdom, from the founding of the Royal Society to 1900. To which is appended the essay of Lord Brooke on the achievements of British science. London, Routledge, 1910. 647 p.

Reference books to guide us in a troubled world, no. 12.

—Supplement, 1900 to 1950, by George Fielding. New York, Putnam, 1957. 312 p.
Q141.A4

BROCKE, William Clarence Scribblers
Brooke, 3d earl, 1852- 1927.

The achievements of British science.

ALLEN, George Herman Michael Trevor
Allen, 1st Baron, 1876-1952.

An index of biographical materials relating to scientists of the United Kingdom, from the founding of the Royal Society to 1900. To which is appended the essay of Lord Brooke on the achievements of British science. London, Routledge, 1910. 647 p.

Reference books to guide us in a troubled world, no. 12.

—Supplement, 1900 to 1950, by George Fielding. New York, Putnam, 1957. 312 p.
Q141.A4

FIELDING, George, 1901-

ALLEN, George Herman Michael Trevor
Allen, 1st Baron, 1876-1952.

An index of biographical materials relating to scientists of the United Kingdom, from the founding of the Royal Society to 1900. To which is appended the essay of Lord Brooke on the achievements of British science. London, Routledge, 1910. 647 p.

Reference books to guide us in a troubled world, no. 12.

—Supplement, 1900 to 1950, by George Fielding. New York, Putnam, 1957. 312 p.
Q141.A4

These entries appear in the author catalog as a result of the coded computer input appearing in the form of the preceding example.

Figure 2

IN TITLE CATALOG:

An index of biographical materials relating to scientists of the United Kingdom,

ALLEN, George, Herman Michael Trevor Allen, 1st Baron, 1876-1952.

An index of biographical materials relating to scientists of the United Kingdom, from the founding of the Royal Society to 1900. To which is appended the essay of Lord Brooke on the achievements of British science. London, Routledge, 1910. 647 p.

Reference books to guide us in a troubled world, no. 12.

—Supplement, 1900 to 1950, by George Fielding. New York, Putnam, 1957. 312 p. QL41.A4

The achievements of British science. ALLEN, George Herman Michael Trevor

Allen, 1st Baron, 1876-1952.

An index of biographical materials relating to scientists of the United Kingdom, from the founding of the Royal Society to 1900. To which is appended the essay of Lord Brooke on the achievements of British science. London, Routledge, 1910. 647 p.

Reference books to guide us in a troubled world, no. 12.

—Supplement, 1900 to 1950, by George Fielding. New York, Putnam, 1957. 312 p. QL41.A4

Identical entry under:

Biographical materials relating to scientists of the United Kingdom.

These entries appear in the title catalog as a result of the coded computer input appearing in the form of the preceding example.

Figure 3

IN SUBJECT CATALOG:

Scientists, British--Biog.

 ALLEN, George Herman Michael Trevor

 Allen, 1st Baron, 1876-1952.

An index of biographical materials relating to scientists of the United Kingdom, from the founding of the Royal Society to 1900. To which is appended the essay of Lord Brooke on the achievements of British science. London, Routledge, 1910. 647 p.

Reference books to guide us in a troubled world, no. 12.

--Supplement, 1900 to 1950, by George Fielding. New York, Putnam, 1947. 312 p. Q141.A4

Identical entry under:

Science--Gt. Brit.--Hist.

These entries appear in the subject catalog as a result of the coded computer input appearing in the form of the preceding example.

Figure 4

Area 70 is formatted as follows:

Card Column:	1 through 40	67-70	71-80
Text of first card, First Trace	7000	Access No.	
Text of second card, " "	7001	" "	
Text of first card, second trace	7010	" "	
Text of second card, second trace	7011	" "	
Text of third card, second trace	7012	" "	
Text of first card, third trace	7021	" "	

All former formatting rules remain valid. Maximum number of cards per entry is thirty-two.

It was decided to bring out author, title, and subject catalogs separately. There was some discussion of having a title index to the author catalog, and this is still being discussed. The first author catalog, with 14,000 titles and 20,000 entries, was slightly smaller than either the title catalog or the subject catalog. Its 463 three-column pages average about 30 titles per page. The computer took four hours to print it out and another ten hours to do the edit and sort (filing) work. The latter (edit and sort time) is a one time

- KUNYADAW, Sir John, 1865-1943
 AUNMAYUN, Sargu, 8g-
 Russo-Polish relations; an historical
 study. London, Cassell, 1945. 80 p.
 Dn4d.3,RY46 1945a
 MAYU, Hideo, 1945a-
 Introduction to Marxist theory.
 New York, Oxford Univ. Pr., 1960.
 324 p.
 First issued as Democracy and Marxism.
 HKS4,MS6 1960
 MAYN, Erast, 1904-
 Animal species and evolution.
 Cambridge, Belknap Press of Harvard
 University Press, 1963. 797 p.
 QH371.N33
 MAZIA, Daniel, 1912- 8g-
 General physiology of cell specializa-
 tion. [by] [e] and Albert Taylor.
 New York, McGraw-Hill [c1963] 434 p.
 QH733.N3
 MAZLISH, Bruce, 1923- 19101 8u102
 BUNZGWSKI, Jacob, 1906-
 The western intellectual tradition,
 from Leonardo da Vinci [by] [e] and
 Bruce Mazlish.
 New York, Harper [c1960] 922 p.
 B791.B.3
 MAZOUZ, Anatole Gregory, 1924-
 Friendship between East and West.
 Princeton, N.J., Van Nostrand [1958]
 290 p.
 Dn453M3
 Mc AFCE, Thomas, 1920-
 Poems and stories.
 Columbia, U. of Missouri P. [1960]
 111 p. (New writers series)
 P3302c.K130P6
 Mc ALLISTER, Mariana Kennedy 19101
 8u102
 HANNA, Geneva R.
 Books, young people, and reading
 guidance. [by] [e] and Mariana R. Mc-
 Allister.
 New York, Harper [c1960] 219 p.
 Z1037.P245
 Mc AULAY, John D., 19101 8u102
 RAGAN, William Burr, 1906-
 Soviet studies for today's children.
 [by] [e] and John D. McAulay.
 New York, Appleton-Century-Croft
 [1961] 148 p.
 L0150A.63
 Mc CALLUM, Ronald Buchanan
 USFURD Liberal Group.
 Medical alternative: studies in libe-
 ralism. [by] [e] and McCallum, Ronald.
 London, Eyre & Spottiswoode, 1962.
 148 p.
 H1229.L47 1962
 Mc CANT, James Lucian, 1906-
 Science and public administration.
 [University] U. of Alabama P., 1960.
 618 p.
 v127-USM62
 Mc CANULUS, Stanley Russell.
 A method of lighting the stage. 4th
 ed. amended and rev.
 New York, Theatre Arts Books [c1958]
 144 p.
 PH40V1.E4M3 1958
 Mc CANTHY, George D.
 Acquisitions and mergers.
 New York, Ronald Press Co. [1963]
 350 p.
 H2741.M17
 Mc CANTHY, Philip John, 1918- 19101
 8u102
 STEPHAN, Frederick Franklin, 1903-
 Sampling opinions; an analysis of sur-
 vey procedures. [by] [e] and Philip J.
 McCarthy.
 New York, Wiley [1958] 451 p.
 HM263.S64
 Mc CANTHY, Philip John, 1918- 19101
 8u102
 STEPHAN, Frederick Franklin, 1903-
 Sampling opinions; an analysis of sur-
 vey procedures. [by] [e] and Philip J.
 McCarthy.
 New York, Wiley [1958] 451 p.
 HM263.S64
 Mc CATHY, Philip John, 1918- 19101
 8u102
 STEPHAN, Frederick Franklin, 1903-
 Sampling opinions; an analysis of sur-
 vey procedures. [by] [e] and Philip J.
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 New York, Wiley [1958] 451 p.
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 STEPHAN, Frederick Franklin, 1903-
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 New York, Wiley [1958] 451 p.
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 vey procedures. [by] [e] and Philip J.
 McCarthy.
 New York, Wiley [1958] 451 p.
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 STEPHAN, Frederick Franklin, 1903-
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 vey procedures. [by] [e] and Philip J.
 McCarthy.
 New York, Wiley [1958] 451 p.
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 Mc CATHY, Philip John, 1918- 19101
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 STEPHAN, Frederick Franklin, 1903-
 Sampling opinions; an analysis of sur-
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 New York, Wiley [1958] 451 p.
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 STEPHAN, Frederick Franklin, 1903-
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 vey procedures. [by] [e] and Philip J.
 McCarthy.
 New York, Wiley [1958] 451 p.
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 STEPHAN, Frederick Franklin, 1903-
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 New York, Wiley [1958] 451 p.
 HM263.S64
 Mc CATHY, Philip John, 1918- 19101
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 STEPHAN, Frederick Franklin, 1903-
 Sampling opinions; an analysis of sur-
 vey procedures. [by] [e] and Philip J.
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 New York, Wiley [1958] 451 p.
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 STEPHAN, Frederick Franklin, 1903-
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 vey procedures. [by] [e] and Philip J.
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 STEPHAN, Frederick Franklin, 1903-
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 New York, Wiley [1958] 451 p.
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 Mc CATHY, Philip John, 1918- 19101
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 STEPHAN, Frederick Franklin, 1903-
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 vey procedures. [by] [e] and Philip J.
 McCarthy.
 New York, Wiley [1958] 451 p.
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 STEPHAN, Frederick Franklin, 1903-
 Sampling opinions; an analysis of sur-
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 New York, Wiley [1958] 451 p.
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 vey procedures. [by] [e] and Philip J.
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 New York, Wiley [1958] 451 p.
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 STEPHAN, Frederick Franklin, 1903-
 Sampling opinions; an analysis of sur-
 vey procedures. [by] [e] and Philip J.
 McCarthy.

Figure 5
Page from the February, 1965, Cumulative Supplement
to the Author Catalog of the Florida
Atlantic University Library

expense. About 6600 titles were prepared for computer input before the arrival of the computer on July 1, 1964. This material was never proofread, but work is beginning on this for the second edition. Since July 1, there has been daily proofreading. The first supplement to the catalog, which included 3,518 titles, came off the computer on November 3, 1964. The second (cumulative) supplement, with 7,829 titles, left the Computer Center on February 6, 1965. There will be a third in May, 1965. After the production of the second edition this summer, monthly supplements are planned. The second edition promises to be twice the size of the first edition.

The computer copy for the catalog is sent to the Duplicating Service of the University where it is photo-reduced to 58 per cent of the original size by a photo-direct process using the Addressograph-Multigraph 705. This by-passes the negative and produces a film-based plate from which the offset machine produces 150 copies. Three plates are produced every two minutes, enough to feed three presses. A thermobind unit called Perfectbind binds and applies the paper cover.

Copies of the catalog are to be found at twenty catalog stations throughout the Library. There is no card catalog nor any catalog center. Each cataloger has a copy of the catalog, as does each reference desk. There are copies in each faculty department. Some professors have their own copies. Catalogs are also sent to the libraries of the other state university campuses, to the nearby junior college libraries, to the local public library, and to the Library of Congress. No copies have been sold, but some have been loaned or given. The Library has been approached with a proposal for merchandising both its catalogs and its tapes. Suggestions are also being considered that Florida Atlantic University Library might contract with other libraries to provide their catalogs.

Faculty members find the nearby catalogs useful in book selection, checking the catalog before sending in an order, and sometimes choosing an alternate title that the Library already has. They also use it for counselling students, for preparing reserve lists, and for planning research papers. All seem to like the book form and the convenience. Students are equally pleased. They can consult a catalog wherever they may be in the Library, they can xerox a page or pages of the catalog for research purposes or for bibliographies or they can borrow a copy. They like the book form approach.

Until such time as the Library can go on line to the IBM 360 system, a weekly "official catalog" print-out will be needed. This will have a full tracing. Author added entries will be included. New author and title authority entries will appear too. This will keep the author and title authority files up to date. The official catalog print-outs will be cumulative weekly for a month, monthly for a quarter, and quarterly for a year. One computer print-out with its carbon copies will be adequate for cataloging and reference uses.

MAYNARD, Sir John, 1865- 1943
KUNOVVALOV, Serge, ed.
Russo-Polish relations; an historical
survey.
London, Cresset Press, 1945. 90 p.
DK418.5.R9K6 1945a

MAYU, Henry Betram, 1911-
Introduction to Marxist theory.
New York, Oxford Univ. Pr., 1960.
334 p.
First issued as Democracy and Marxism.
HX86.M36 1960

MAYN, Ernst, 1904-
Animal species and evolution.
Cambridge, Belknap Press of Harvard
University Press, 1963. 797 p.
QH371.M33

MAZIA, Daniel, 1912- ed.
General physiology of cell specializa-
tion [by] ss [and] Albert Tyler.
New York, McGraw-Hill [c1963] 434 p.
QH573.M3

MAZLISH, Bruce, 1923- joint author
BRUNOWSKI, Jacob, 1908-
The Western intellectual tradition,
from Leonardo to Hegel [by] ss [and]
Bruce Mazlish.
New York, Harper [c1960] 522 p.
B791.B75

MAZOUK, Anatole Gregory, 1900-
Finland between East and West.
Princeton, N.J., Van Nostrand [1956]
290 p.
DA451M43

Mc CARTHY, Phillip John, 1918- joint author
STEPHAN, Frederick Franklin, 1903-
Sampling opinions; an analysis of sur-
vey procedure, by ss and Philip P. Mc-
Carthy.
New York, Wiley [1958] 451 p.
HM263.S84

Mc CARTY, Henry R.
The cooperative approach to audio-
visual programs. Prepared by ss and
Horace C. Hartsell.
[Washington, 1959] 80 p.
LB1043.M23

Mc CARY, James L., ed.
Psychology of personality; six modern
approaches.
New York, Logos Press, 1956. 383 p.
BF698.M2214

Mc CLELLAN, Aubrey L., joint author
PIMENTEL, George C.
The hydrogen bond [by] ss [and]
Aubrey L. McClellan.
San Francisco, Freeman [c1960] 475 p.
QD471.P5

Mc CLELLAN, Aubrey Lester, 1923-
Tables of experimental dipole moments.
San Francisco, Freeman [1963] 713 p.
QD571.M27

Mc CLELLAN, Grant S. ed.
South Africa.
New York, H.W. Wilson Co., 1962.
160 p.

Figure 6
Sample Print-Out, Two of Three Columns

The dependence of the Library upon the Computer Center and the Duplicating Center should be emphasized. At present, the Computer Center is administratively under the Registrar, which has resulted in a tendency to give programming priority to the Registrar's work. The first draft of the University's constitution gives independent status to the Computer Center, and this should create a more equitable situation. Two of the programmers on the Computer Center staff spend considerable time on library programming. One devotes himself to cataloging programming and the other to serials, acquisitions, and circulation programming. Although many on the library staff can do simple programming, the programming has been left completely to the Computer Center staff. The Director of the Library is a member of the faculty's Computer Committee which has made important decisions, such as the one to order the IBM 360 system. Hopefully this will become an advisory committee to the Computer Center; it has been so indicated in the draft constitution.

The Computer Center, in catalog production work, takes about one week to turn out the copy needed by the Duplicating Center. The latter then takes about two weeks to provide the first 100 copies, which serves the Library and faculty needs. The remaining fifty copies take an additional two weeks. The welfare of the Duplicating Center and of the Computer Center are of direct concern to the Library and the library staff works closely with both.

The IBM 357 Data Collection System is used for preparing computer input for the circulation records that are maintained on computer tape. This equipment takes the book's ID card and the reader's ID card and produces two identical transaction cards. One of these enters the charge on the computer record, and one erases the charge when the book is returned. The computer record is updated each day, and each day the computer prints out from the circulation tapes the following: a listing of all books in circulation arranged by call number, giving the ID number of the borrower, the date due, and indication of faculty, staff, graduate, or undergraduate status; a listing of all books in circulation by borrower's ID number (his Social Security Number), including the same data as above; a listing of overdues in both orders; and a listing of hold requests. There is a weekly print-out of books on reserve and a reference shelf list. A meeting was held with the Computer Center staff on the matter of statistics. The Library indicated a variety of statistics that would be needed, and the programmers said that these needs could be satisfied and that the Library would be supplied with statistics needed on demand. To date, the Library has been so supplied.

A number of problems has arisen in connection with the circulation system. The book cards are punched with the call number and certain controls. The control punches are gang punched in the Computer Center. The call number punches are made in the Circulation Department of the Library. In one batch of gang punching, an error was made and not caught. This resulted in some 800 faculty cards being placed in new books. The computer refuses to accept transaction cards made from these cards. Fortunately, a visual check of the transaction card shows this up. Shelf reading also helps. Another problem has been the need to punch cards for material that does not have a book card. This includes uncataloged government documents, magazines, and vertical file materials. This was solved by releasing the key punch on one of the IBM 357 stations to punch cards at the time of charging. At present, one station handles the 1100 student load, and the Library reserves the other for special charges. When the load becomes heavier, the second station can be converted to key punching at will. For uncataloged government documents, the Documents Office classification number is used. For other materials, a straight alphabetical approach is used.

When Florida Atlantic University Library lends to another library, it creates a borrower's badge for this library and checks the

FAU LIBRARY DAILY CIRCULATION LIST 03/04/75

PAGE 2

[illegible]

Figure 7

Material that is overdue is recognized by the computer, and

Borrowers may place holds on material that is in circulation. The borrower's ID number and the call number of the needed material are entered on a transmittal sheet from which IBM cards are key punched as input to the computer. The computer holds the data and prints out a list of hold requests. When the particular materials

are returned to the circulation desk, and the return cards for them are sent to the Data Processing Center, the computer recognizes, upon making the match, that the material has a hold placed on it. A list of materials to be held is then printed. At the present time, because circulation is not too great, the processing shelves in circulation can be checked against the hold print-out, and books listed on the print-out can be retrieved before they are shelved. When circulation becomes larger, the plan is to create a list of holds on magnetic tape. Just before shelving, probably two to three times a day, the return cards will be matched against the hold tape. The result of the match is a "materials to be held" list which includes just those materials, out of the many waiting to be shelved, that are to be held. The staff member can then go to the processing shelves and retrieve just those items that are to be held and shelve the rest—probably less than 1 per cent of the total awaiting shelving.

Serials are now being checked in by pulling computer-produced cards from a tub file. The computer record from which these cards are produced is created by using the old serials coding form for providing computer input for each journal. This coding form has been changed slightly and is now undergoing a major revision. The current form is described in detail by Ted Srygley.²

The first part of the new form is shown in this article. Programming has been completed for the use of the new form, and an early delivery date has been promised for the new Current Serials List. Both full title and short title have been coded in for all journals. It was first thought that the short title would serve for the Current Serials List, but users have experienced such difficulties with the abbreviations that it was decided to use the full title for all serials lists being used by the public. The first Current Serials Lists will use the short title, but subsequent lists will use the full title. Serials title entries will be the same as those set for the catalog. Programming is being done for claiming letters. Human recognition will be used for deciding for which items claiming will be done. A manual run through the cards left in the tub file will determine which cards to send to the computer for the claiming routine. There are too many imponderables to rely on the computer for determining which items should be claimed. The Library's holding list is unsatisfactory and is being reprogrammed. The end result will approximate the form of the UCSD list,³ with perhaps some effort at space saving.

It should be emphasized that serials records must be corrected before they can be successfully computerized. After the information about the journals being received had been put on computer tape, the computer was asked for a check-in card for each issue of each journal to be received during the next six months. In answer, it gave only about half the information requested, because it had been

given either incomplete or incorrect information. This was corrected, and now there are adequate check-in files and correct serials records on tape.

Subject print-out of serials can be easily arranged and provides a useful approach to the serials collection. One such was printed out last year and the Library is asking for another shortly. Faculty members (new ones particularly) frequently ask what journals the Library has in a certain field. In adding serials titles, such a listing is useful.

Acquisitions procedures are in a "go" state, but waiting for the completion of Business Office programming. The transmittal sheet and processing information list elements include: author, title, edition, date of publication, series, place of publication, volume numbers, price, notifications code, number of copies, fund number, call number, date of order, status, process number

LIBRARY SERIALS

3-15-65

ADD, CHANGE, DELETE
CARD FORMATS

NOTE -- CARD CODE
(COLS. 73-80)

00-48 NEW ADD
50-58 CHANGE
59 DELETE

CARD COLS.	1	2	3	4	5	6	7	8	9	10	
80	SHORT TITLE				333 567	104 112	515 314	516 516	616 910	617 910	717 817
150	FULL TITLE (70)				333 567	104 112	515 314	516 516	616 910	617 910	717 817
220	FULL TITLE (CONTINUED) (70)				333 567	104 112	515 314	516 516	616 910	617 910	717 817
290	VENDOR NAME (CLAIMING) (35)				333 567	104 112	515 314	516 516	616 910	617 910	717 817
360	VENDOR CITY (35)				333 567	104 112	515 314	516 516	616 910	617 910	717 817
	VENDOR STATE OR COUNTRY (10)				333 567	104 112	515 314	516 516	616 910	617 910	717 817
	VENDOR NO. (6)				333 567	104 112	515 314	516 516	616 910	617 910	717 817
	CALL NO. (35)				333 567	104 112	515 314	516 516	616 910	617 910	717 817

SERIAL NO.

Figure 8
Partial Coding Form for Entering Serials Information
on Computer Tape. Additional Form Includes
Financial and Binding Information

FLA. ATLANTIC UNIVERSITY LIBRARY		CURRENT SERIALS LISTING		3-31-65		PAGE 51	
FULL TITLE OR SHORT TITLE / SERIAL NO. OR CALL NO.		INCLUDES THE LATEST ISSUE RECEIVED, OF ALL CURRENTLY ACTIVE TITLES.					
		FREQUENCY OF PUBLICATION (ARRIVAL NOTE IF ANY)	PUBLISHED THIS MONTH	LATEST ISSUE VOL./ISS. NO.	RECEIVED COVER DATE	DATE REC'D.	
MICROCUSH / 62040000		4 ISSUES PER YEAR (USUALLY REC'D. 2 NOS. LATE)	NO	9/	4 02-	-65 02-	-65
MICROSCOP + CRYSTAL FRONT / 62000000		6 ISSUES PER YEAR (USUALLY REC'D. 2 NOS. LATE)	NO	14/	7 12-	-64 12-	-64
MIDSTFAH / 62160000		4 ISSUES PER YEAR	YES	10/	4 12-	-64 12-	-64
MIDWAY / 62240000		4 ISSUES PER YEAR	NO				
MIKROCHIM + ICHIMIAL ACTA / 62320000		6 ISSUES PER YEAR (USUALLY REC'D. 2 NOS. LATE)	NO	1964/	6 12-	-64 12-	-64
MIKROKUSKUS / 62400000		MONTHLY (USUALLY REC'D. 2 NOS. LATE)	YES	54/	1 01-	-65 01-	-65
MIKROSKOPIE (WIENNA) / 62400000		SEMI-MONTHLY (USUALLY REC'D. 3 NOS. LATE)	NO	19/	6 12-	-64 12-	-64
MILHAHA NEW FUND QUANT / 62560000		4 ISSUES PER YEAR	NO	43/	3 01-	-65 01-	-65
MIL ENG / 62640000		6 ISSUES PER YEAR	YES	56/	374 11-	-64 11-	-64
MILLION DOLLAR DIX (DUN + BHAOST) / 62660000		2 ISSUES PER YEAR	NO				
MIND / 62720000		4 ISSUES PER YEAR (USUALLY REC'D. 2 NOS. LATE)	NO	74/	293 01-	-65 01-	-65
MISSILES + ROCKETS / 62800000		WEEKLY	YES	16/	13 03-29-65	03-	-65
MLN / 62900000		5 ISSUES PER YEAR (USUALLY REC'D. 2 NOS. LATE)	YES	74/	5 12-	-64 12-	-64
MOD AGE / 63040000		4 ISSUES PER YEAR	NO	9/	1 02-	-65 02-	-65
MOD DWANA / 63120000		4 ISSUES PER YEAR	NO	7/	4 02-	-65 02-	-65
MOD FICTION STUD / 63200000		4 ISSUES PER YEAR (USUALLY REC'D. 2 NOS. LATE)	YES	10/	4 12-	-64 12-	-64
MOD LANG J / 63280000		6 ISSUES PER YEAR	YES	A9/	3 03-	-65 03-	-65
MOD MED / 63360000		BI-WEEKLY	YES	33/	6 03-15-65	03-	-65
MOD PACKAGING / 63440000		MONTHLY	YES	38/	7 03-	-65 03-	-65
MOD PACKAGING ENCYCL / 63520000		1 ISSUE PER YEAR	NO	1965/	1 01-	-65 01-	-65
MOD PHILOLOGY / 63600000		4 ISSUES PER YEAR (USUALLY REC'D. 1 NO. LATE)	NO	62/	3 02-	-65 02-	-65
MOD PHOTOGR / 63680000		MONTHLY (USUALLY REC'D. 2 NOS. EARLY)	YES	29/	1 01-	-65 01-	-65

Figure 9
Weekly Serials List. Must Type Required List for Serials

(accession type number instead of present LUHN number), purchase order number, pagination, and vendor. The book request form (transmittal sheet) goes to acquisitions for approval of purchase where the bibliographical data is verified and the request form corrected. Upon approval, the transmitted data is key punched and sent to the computer.

The computer will then print out on order the following: purchase order, the Processing Information List, a Drop List for items already in the Library, and cards for the Acquisitions Department and the Cataloging Department for their use in providing data for the updating of the Processing Information List. This list will include all items that have been ordered but are not yet in the catalog, including unprocessed gifts. It will indicate the whereabouts of each item in the work process and will be printed out on a daily basis.

The Library's organization is arranged to suit the needs of the new system. In this area, as in others, the Library is changing as the system develops. Data Processing, Liaison Services, and Information Retrieval Services are the three main divisions. Data Processing includes technical services plus circulation; Information Retrieval Services include reference work and planning for the uses of the IBM 360 system; Liaison Services concern daily contact with the faculty on faculty needs in courses and research. The latter division now has only one person, who spends his time consulting with faculty members and reporting back to the Library staff. This has proved to be highly effective. Faculty needs are determined ahead, fruitful suggestions are made to faculty, faculty gripes get a hearing, and the professor gets a feedback on student reactions. The Head of Liaison Services also serves on the faculty Curriculum Committee, and provides that committee with library information needed in planning for new courses.

There is the possibility of making all three division head positions research positions, with these and the department heads being

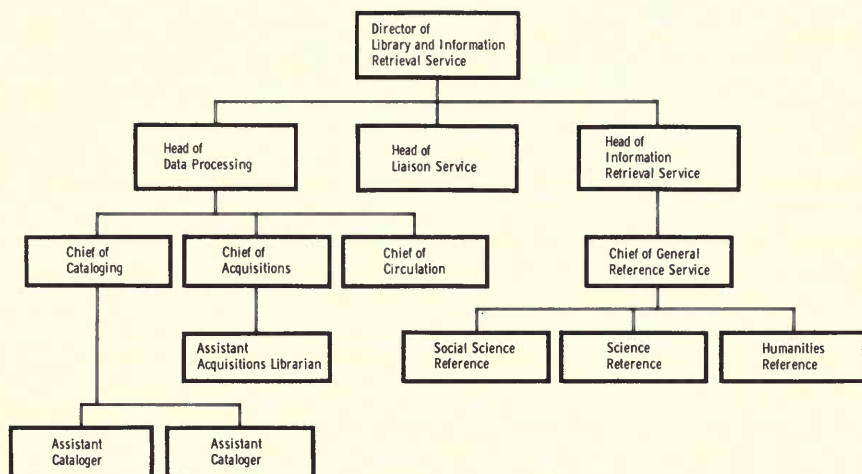


Figure 11
Florida Atlantic University Organization Chart, March 1965

responsible to the Director. The Data Processing Head would then conduct the user study of the system and maintain liaison with the Computer Center, the Information Retrieval Head would plan the uses of the IBM 360 system, and the Liaison Services Head would accept responsibility for development of the SDI (Selective Dissemination of Information) system and gathering of faculty reading interest profiles for the computer, as well as carrying on his liaison work with the faculty.

As planned, the SDI system will treat only of book materials and will match the reading interest profiles with LC subject headings assigned to the books. The system will be designed for the University situation, but full advantage will be taken of the IBM experience with its successful internal SDI system.

The use study is badly needed to help give direction to the development of the system. User reaction to the book catalog, for instance, can help determine those features of the catalog which should be preserved and those which should be changed. Readers must be trained in the use of the new machinery and the products of the new machinery. This library is concerned with the best ways to do this. It is interested in the relative use of the author, title, and subject catalogs. Which is most important? Do supplements to each need to be produced with the same frequency? Do subject headings in the computer-produced catalog do the same job that they

do in a card catalog? Is the filing order better or worse because of concessions to the computer? In the matter of the Processing Information List, the Library is interested in who the users of this list will be and what information they will seek from it. Will two forms of the PIL be necessary, one for public use and one for staff use?

The completion of Business Office programming on March 31, 1965, will begin the completion of the system, and user studies can begin this summer. The catalog will then have passed through one edition and its supplements, and one generation of users will have had an opportunity to test its use.

We decided at Navy Pier that information retrieval was not our dish of tea. We also decided that bibliographic searching was strictly a manual job. With the advent of the IBM 360 system, we are re-considering information retrieval. We suspect that the costs per search will be much lower. Also, the on-line approach feasibility makes this possibility more attractive. The potential use of the IBM 360 system is concerned with non-reference library applications, too. The present research for reference uses revolves around ways and means of instructing the computer in how to conduct bibliographic searches in the computer catalog record. It is hoped that by creating a device which will enable the computer to establish a hierarchical system for the LC classification and subject heading list, a better kind of literature search will be made possible. On-line applications for non-reference uses present interesting possibilities. For instance, when we are on-line to the computer, a circulation transaction can be halted by the computer if the borrower has any books out overdue. This could eliminate the fine system. The hold requests could also be handled more efficiently. In serials, updating of the computer record could be done immediately as the journal is checked in. In acquisitions, bibliographic checking could be done immediately. An experiment is now in progress on bibliographic checking, using the present equipment. The titles indexed in the 1963 Essay and General Literature Index were checked against this library's catalog by a clerk. The staff is now programming to conduct a search of the same titles on the catalog tapes by the computer. In both cases, both author and title approaches are being used to see if one is better than the other. The cataloging use of the on-line approach and read-out facility of the IBM 360 system may do such things as eliminate the print-out of the "official catalog" of the authority lists and of the shelf list. Catalog corrections may be made on this basis also.

The Computer Center is staffed with capable programming and systems people. The IBM 1460 computer and the IBM 1403 printer equipped with the special print chain is servicing the Library, the Registrar, the Business Office, and some courses in the College of Business Administration. Because we are waiting for the IBM 360

system for research-type computer use, some use of the equipment by the science faculty has also been made that should have been done on a larger computer. The result was much more programming and computer time than the type of problems justified. Recently, however, an arrangement with the University of Miami was made to use their IBM 7090 at the same rates as are charged to their own students and faculty. It should be repeated that the Computer Center should be administratively free of any one area so that it can be just in allotting time. With all library records on computer tape, the Computer Center becomes extremely important to the Library. Its staff must understand library problems, particularly the reasons for needing certain print-outs on a regularly scheduled basis. In turn, the Library must have staff that understands computer problems. Working together, great things can be achieved.

The following is a list of the computer produced control documents either in use or to be produced by the end of this school year: (Those with an asterisk are not yet being delivered. Those without an asterisk are now being received. The only exception is the SDI notices, which will be delayed until the next school year.)

Catalog (irregular)

Catalog Supplement (every three months this year, monthly thereafter)

Cataloging proof sheets (daily)

Authority Lists (author, title, and subject) irregular

Circulation Lists (daily)

1. Listing by call number
2. Listing by borrowers' ID numbers
3. Overdue listing by call number
4. Overdue listing by ID number
5. Listing of hold requests

Reserves (weekly listing of all books on reserve, arranged by call number)

Reference shelf list (weekly listing, arranged by call number)

Circulation statistical listing (every three months)

Overdues label listing (weekly), for overdues mailing. (All books are due two weeks from Tuesday.)

Current serials listing (twice weekly)

Serials listing by subject (irregular)

Serials title listing (monthly), until Current Serials Listing comes out

Serials listing of changes and deletions (monthly)

Serials check-in listings

1. Cards for check-in, computer produced, (one for each issue of each journal)

- 2. Serials master record (status of data for check-in), monthly
- Serials holdings list (irregular)
- *Serials claiming letters
- Serials orders lists (annual)
- *Serials and book binding lists (irregular)
- Serials and book orders (irregular, frequent)
- *Processing Information List

- 1. Complete data form (daily) for internal use
- 2. Brief data form (daily) for public service use

- *Budget control listing (daily)
- *Invoice, voucher, receiving, and inspection print-outs for Business Office use.
- *SDI notices to faculty (irregular)
- *Shelf list (irregular)
- *Official catalog (weekly)

The systems approach in library computerization extends beyond the Library. It soon became apparent that both the Registrar and the Business Office should be in an even larger system of which the Library would be only a part. The Registrar is now completely computerized; and the Library made use of this fact to encourage use of the Social Security Number as an ID number, to justify an ID card suited to library needs, to provide a broader base for statistical analysis, and to print out student addresses for overdue notices. The Business Office programming is just being finished and is being done with full knowledge of library needs. Overdue fines will be handled by the Business Office, including sending notices and collecting overdues. Budget listings, invoices, vouchers receiving, and inspection print-outs will be of mutual interest to the Library and the Business Office.

Beyond the system within the University, we are thinking more and more of the system extending to the other state university libraries, the other state university business offices, and to the state financial center. The other university libraries now want to take advantage of what Florida Atlantic University Library has learned and have approved appointment of an Inter-university Library Committee to discuss ways and means of doing this. The committee will be composed of technical processes librarians, who will be most concerned. There has been discussion of using the telephone company's "Tel-Pak" system for transmission of computer data, for facsimile transmission (using Xerox's Scanner-Printer), for voice transmission, and for typewriter hook-ups. This may be meaningful if other campuses decide to go in the same direction. It will be very

helpful if the new state university campuses in Pensacola and Orlando adopt Florida Atlantic University Library's system. Members of its staff are the official consultants for the library planning for those campuses, and they are intent on extending our system. It is obvious that such an extension can save money for all concerned. This library is training librarians from other libraries in the use of the system and is making information about all aspects of the system available to everyone.

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